



NC Fuel Gas

1st Qtr. 2014 Code Answers in brown (Jan-Mar) 2nd Qtr. 2014 Code Answers in green (Apr- Jun)
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100 Chapter 1 Administration

200 Chapter 2 Definitions

300 Chapter 3 General Regulations

303.3 #5 - Question: If a gas appliance is installed in the attic, behind a knee wall, is a closer required?

Answer: Yes, a closer is required. See email from Dan Dittman

From: Dittman, Daniel E [mailto:dan.dittman@ncdoi.gov]

Sent: Thursday, March 13, 2014 10:48 AM

To: Rowland, Tommy D.

Subject: RE: Fuel Gas 303.3 #5

Mr. Rowland,

If the knee wall is into a bonus room, well then that is not an appliance that is opening into a space used as a bedroom or bathroom.

If that bonus room is also a bedroom, then this section would apply, and yes, the closure would be required.



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Does this answer your question?

Thanks,

Daniel Dittman, PE, CMVP

919-661-5880 x237

NC DOI

Chief Mechanical Code Consultant

400 Chapter 4 Gas Piping

403.9 - Question: I am being told that I cannot use the coupling that comes with the gas pipe, why is this?

Answer: Section 403.9 requires metallic pipe and fitting threads to be tapered. These merchant couplings are straight threads and are used to protect the threads during shipping. A standard black steel coupling is made of malleable steel, where the merchant couplings are made from steel tubing and can split. 403.9 Metallic pipe threads. Metallic pipe and fitting threads shall be taper pipe threads and shall comply with ASME B1.20.1

404.13 - Question: I am building a house and want to install a grill in the future. Instead of capping off the gas line and having to pull another mechanical permit, can I install a quick connect in the location I want the grill? Then all I have to do is plug the gas line for the grill into the quick connect.

Answer: Yes, The exception for Section 404.13 allows the installation of listed and labeled quick-disconnect devices. Installing a listed and labeled quick connect would not require altering the gas piping system in the future to add the grill, therefore an additional permit would not be required for the gas piping. If the



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grill is going to be permanently installed (cannot be moved around such as on a deck) then a permit still would be required.

404.13 Outlet closures. Gas outlets that do not connect to appliances shall be capped gas tight.

Exception: Listed and labeled flush-mounted-type quick disconnect devices and listed and labeled gas convenience outlets shall be installed in accordance with the manufacturer's installation instructions.

406.1.4 - Question: House on Temp Heat, does the entire gas line need to be tested at the final, or just the section that is not under operation?

Answer: The gas line is permitted to be tested in sections per 406.1.4. All sections of the gas line must be tested and no section may be tied into the gas service without being tested.

406.1.4 Section testing. A piping system shall be permitted to be tested as a complete unit or in sections. Under no circumstances shall a valve in a line be used as a bulkhead between gas in one section of the piping system and test medium in an adjacent section, unless two valves are installed in series with a valved "telltale" located between these valves. A valve shall not be subjected to the test pressure unless it can be determined that the valve, including the valve-closing mechanism, is designed to safely withstand the test pressure.

406.3.4 - Question: Can you clarify the test procedure for gas piping with a log lighter? I have been told I have to remove the log lighter and cap the gas line to do the pressure test.

Answer: Valve isolation is permitted by the code, section 406.3.4 NCFGC. This allows the appliance shut off valve to be closed; to protect the appliance from the test pressure. With valve isolation there is no need to remove the appliance.

406.3.4 Valve isolation. Where the piping system is connected to appliances or equipment designed for operating pressures equal to or greater than the test



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pressure, such appliances or equipment shall be isolated from the piping system by closing the individual appliance or equipment shutoff valve(s).

Appliance shutoff - A valve located in the piping system, used to isolate individual appliances for purposes such as service or replacement.

500 Chapter 5 Chimneys & Vents

600 Chapter 6 Specific Appliances

603.1 - Question: I made my own log lighter out of black steel pipe, but was turned down. The inspector said it did not comply with the code. What code section does it not comply with?

Answer: Section 603.1 NCFGC, states log lighters shall be tested in accordance with CSA 8 and installed in accordance with the manufacturer's instructions.

623.7 - Question: A contractor wants to paint a wood shelf with fire retardant paint and install it less than 30 inches above a gas cooktop. Would this be allowed?

Answer: No. Section 623.7 states the 30 inch clearance is required to combustibles. Painting wood with a fire retardant paint does not make it non-combustible.

623.7 (IFGS) Vertical clearance above cooking top. Household cooking appliances shall have a vertical clearance above the cooking top of not less than 30 inches (760 mm) to combustible material and metal cabinets. A minimum clearance of 24 inches (610 mm) is permitted where one of the following is installed:

1. The underside of the combustible material or metal cabinet above the cooking top is protected with not less than 1/4-inch (6 mm) insulating millboard covered with sheet metal not less than 0.0122 inch (0.3 mm) thick.



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2. A metal ventilating hood constructed of sheet metal not less than 0.0122 inch (0.3 mm) thick is installed above

the cooking top with a clearance of not less than 1/4 inch (6.4 mm) between the hood and the underside of the combustible material or metal cabinet. The hood shall have a width not less than the width of the appliance and shall be centered over the appliance.

3. A listed cooking appliance or microwave oven is installed over a listed cooking appliance and in compliance with the terms of the manufacturer's installation instructions for the upper appliance.

700 Chapter 7 Gaseous Hydrogen Systems

Policy

Policy - Question: Can you use a storm collar to dress up a vent that passes through the sheetrock ceiling?

Answer: Yes, this has been a common practice to invert a storm collar and use it as a beauty ring to hide the sheetrock being cut back from the vent.

Another common practice is to cut the sheetrock back to the required clearance and fill the space in with mud. The mud is considered non-combustible.

Policy - Question: If a house or condo has a gas stub and 220 electrical range receptacle and the range is not installed and this is the only gas stub in the house, what is the proper procedure for finaling out this inspection?

Answer: Document what is there when the final is completed. If there is no range, make sure the gas outlet is capped off.

From: Spidel, Bill

Sent: Wednesday, March 12, 2014 10:17 AM



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To: Rowland, Tommy D.

Cc: Jeff King

Subject: PNG policy on setting meters

Tommy, I spoke with Jeff King from PNG this am; He says their techs verify that an active appliance is set when they go out to do a meter install. If none installed, they will not set a meter.

By the same token, I have spoke this AM with Larry Currin with PSNC; he says they just set and clock the meter regardless of what the inspector notes are. Then, if there is an issue of no fuel consumption after the first month, they send a tech out to investigate. He says usually when the owner gets their first facilities charge on their monthly bill, and not using any, they call and have it removed...thanks

PS- both recommended the Inspectors make good clear notes on their inspections as to what if any appliances are actually there.

Other

Manufacture Instructions - Question: I have used the same gas logs and factory built fireplace in other jurisdictions, but I got turned down because the manufacture's instructions for the fireplace, said the maximum input rating of the logs is 40,000 btu and the ones I am using is 50,000 btu. The salesman said it would be fine.

Answer: If the manufacture's installation instructions state the maximum is 40,000 btu, then that will be the maximum size logs that can be used with that fireplace.

Manufacture Instructions - Question: Can the Maxitrol 325-3L regulator be used with a tankless water heater?



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Answer: The 325-3L regulator has an individual maximum load of 140,000 Btu. If the maximum rating on the tankless water heater does not exceed a 140,000 Btu, then the answer is yes. Most tankless water heaters are rated at 199,000 Btu and would require the 325-5L regulator, which is rated at 425,000 Btu for an individual appliance. Keep in mind that some tankless water heaters have a range for the demand (ex. 90,000 to 199,000 Btus). The water heater will fire at the highest rate and adjust down.

See Reference sheet for Maxitrol Regulators at the end of this agenda